News Highlights

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Friends of the Cancer Center Offers Quarterly Award for Winning Publication

by Chantal Jackson

Friends of the Cancer Center awards $4,500.00 quarterly, for a research item they deem worthy. A minimum of 80% of this monetary value is allocated to the research described in the winning publication. The award is based upon how well the research advances the field in terms of diagnosis, how the research supports the overall mission of the UH Cancer Center, and the impact factor of the journal in which the paper was published.

In October, Dr. Wei Jia was the recipient of this quarterly prize, for his collaborative paper, "A distinct glucose metabolism signature of acute myeloid leukemia with prognostic value" published in the September 4, 2014 issue of Blood. Dr. Wei Jia was the corresponding author in this paper describing a panel of markers used in the identification of intermediate group prognosis (the anticipated course of the disease) in individuals with acute myeloid leukemia (AML), a type of blood cancer.

AML is a group of blood cancers that can be divided into those associated with variable health outcomes: favorable, intermediate, and unfavorable. While the favorable and unfavorable groups demonstrate clear prognoses, the outcome of the intermediate group is not as straightforward.

In collaboration with Dr. Sai-Juan Chen and Dr. Zhu Chen in Shanghai, China, Dr. Jia and his team used serum metabolic profiling as a measure, and subsequently determined that the profiles of AML patients were markedly different from those of healthy individuals. Metabolite markers were differently expressed in serum which contributed to these different profiles.

Dr. Wei Jia explains: "Physicians can identify patients with AML who have favorable, intermediate, or unfavorable characteristics and their respective associated prognostic outcomes. It would be valuable to patients in the intermediate group for their physicians to be able to use these molecular biomarkers to determine prognosis".

In this paper, the authors identify serum metabolites and metabolic pathways as novel prognostic markers and potential therapeutic targets. By incorporating these markers, intermediate group prognoses can be determined, and a better targeted treatment plan can be established.